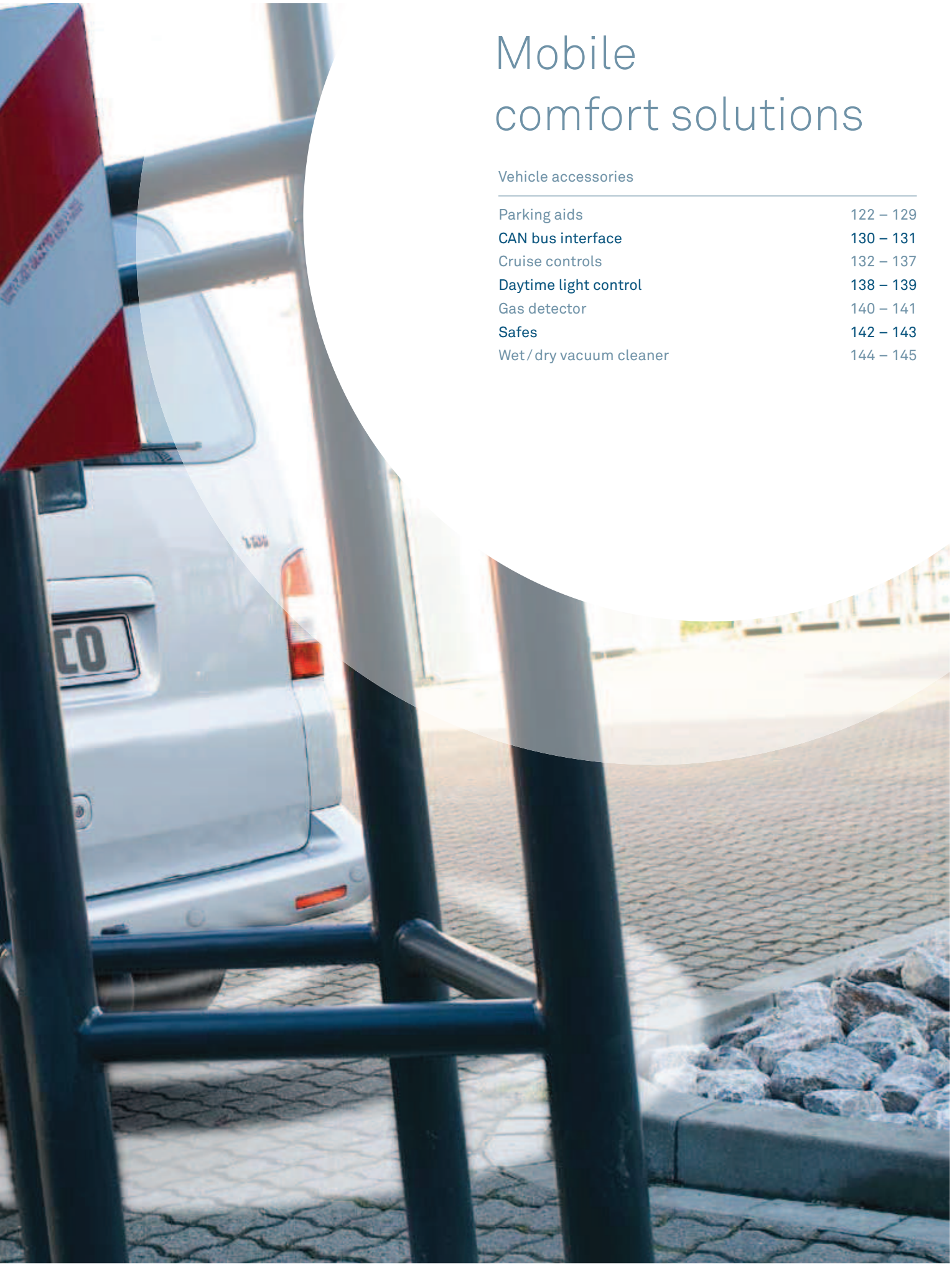
CARAVELLE
WAECO



Mobile comfort solutions

Vehicle accessories

Parking aids	122 – 129
CAN bus interface	130 – 131
Cruise controls	132 – 137
Daytime light control	138 – 139
Gas detector	140 – 141
Safes	142 – 143
Wet / dry vacuum cleaner	144 – 145

Put an end to stress

Make your vehicle perfect!

A lapse in concentration is all it takes ... You hit the ramp while reversing, you're caught speeding by a radar trap or without the mandatory lighting while abroad. And let's not even think about break-ins and thefts. It's probably best if you simply avoid the problem and invest instead in **mobile solutions from Dometic WAECO**. All of the products can be easily and quickly installed in your vehicle while the battery vac can be stowed in the storage compartment.

Treat yourself to a **little luxury in your hardworking life** – comfort accessories by Dometic WAECO will help you arrive at your destination in a more relaxed state.

Contents, specifications and availability are subject to change serving the technical improvement.

Parking aids

Six complete, ready-to-fit systems to suit all cases. Hard-wired or with wireless signal transmission, for the rear as well as for the front bumper. Neat solutions even for tricky installation conditions.

WAECO MagicWatch

Pages 122 – 129

MagicWatch MW 650

Cruise controls

A constant speed – automatically, conveniently, safely! The comfort cruise control and speed limiter for all vehicles with electronic accelerator, with or without CAN bus. Designed for specific vehicles, fast and easy installation.

WAECO MagicSpeed

Pages 132 – 137

MagicSpeed MS 880

Daytime light control

Activates the complete vehicle lighting when you start the ignition. With coming home function: dimmed headlights stay on for some time after the ignition has been turned off.

WAECO MagicTouch

Pages 138 – 139

MagicTouch TFL 100

Gas detector

Beware of burglars! The compact unit detects all common knock-out gases. Visual and acoustic alarm function.

WAECO MagicSafe

Pages 140 – 141

MagicSafe MSG 150

Safes

Keep cash, cameras, important documents and laptops out of reach of burglars. Available in various sizes and design options, with mechanical or automatic locking system.

Dometic SAFE

Pages 142 – 143

Dometic SAFE 281C

Wet / dry vacuum cleaner

Gets rugs and upholstery clean in no time at all. Powerful unit, cordless battery operation for extra convenience. Full range of accessories, battery recharging from 12 or 230 volts.

WAECO PowerVac

Pages 144 – 145

PowerVac PV 100

For 12 / 24 volts!

Sharpen your perception!

Complete, ready-to-fit systems for truck and vans

Six systems to choose from

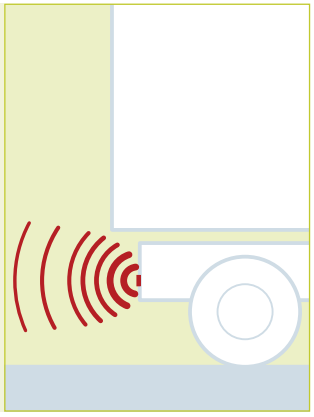
Is there enough space, or not? When reversing in awkward places, this is always the question. MagicWatch parking aids will tell you precisely how close you are. They take the stress out of driving and reduce the risk of bumps and scrapes. Six parking aid models are available, including two systems with wireless signal transmission. Pick the one that best suits your vehicle and needs. The overview on page 123 gives you all you need to know at a glance.

How does MagicWatch work?

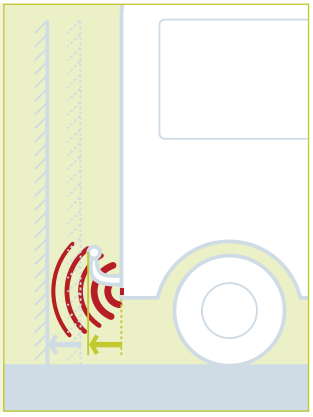
The parking aid is activated as soon as reverse gear is engaged. It measures the distance to an obstacle with the help of four ultrasonic sensors mounted on the rear of your vehicle. Signal transmission to the signal generator is wireless or hard-wired. MagicWatch warns you if your vehicle comes too close to an obstacle. Depending on the system, this is done by an acoustic signal (MWE 900, MWE 910, MWE 2000, MW 2500) or by an acoustic and visual signal (MW 650, MWE 650).

A thinking system

MagicWatch models MW 650 and MWE 650 feature Digital Signal Memory (DSM). These parking aids are able to "memorise" smaller objects fitted to the vehicle (e.g. tow-bars or bodywork extensions) and take them into account when checking the area behind the vehicle.
Your advantage: no "false alarms" while reversing.



The parking aid models MWE 900, MWE 910, MWE 2000 and MW 2500 give you the option to shift the stop line up to 40 cm towards the rear.
Your advantage: rear-mounted objects protruding over the sensors (steps, tow-bars, spare tyres, etc.) are considered in the distance calculation.



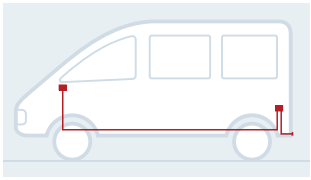
Contents, specifications and availability are subject to change serving the technical improvement.

Decision aid: features and functions of MagicWatch parking aids

System	Transmission of the sensor signals	Display of distance data	Number / Fastening of the sensors	Range rear	/ front	Ideal for	Page
MW 650	Hard-wired	Acoustic and visual	4 sub-mounted sensors	30 – 250 cm		Trucks, buses, agricultural machinery	124
MWE 650	Hard-wired	Acoustic and visual	4 built-in sensors	30 – 250 cm		Trucks, buses, agricultural machinery	124
MWE 900	Hard-wired	Acoustic	4 built-in sensors	30 – 180 cm		Vans, mini buses	126
MWE 910	Hard-wired	Acoustic	8 built-in sensors	30 – 180 cm	/ 25 – 95 cm	Vans, mini buses	126
MWE 2000	Wireless	Acoustic	4 built-in sensors	30 – 180 cm		Trailers used with changing towing vehicles	128
MW 2500	Wireless	Acoustic	2 mounting profiles with 4 sensors	30 – 180 cm		Vans and light trucks	129

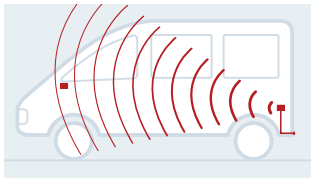
Transmission of the sensor signals

Hard-wired transmission
Sensors are mounted on the vehicle's rear and wired with the control unit. The latter transmits the signal via a hard cable connection to the signal generator in the cockpit.



- Easy to fit with plug-in components
- Splash-proof control unit
- Extendable sensor cables (up to 10 m)
- Average installation time: approx. 3 to 4 h

Wireless transmission
Sensors are mounted on the vehicle's rear and wired with the control unit. The latter transmits the signal via a wireless link to the signal generator in the cockpit.



- Especially easy to fit: no need to lay cables from the transmitter to the receiver!
- Average installation time: approx. 2 to 3 h (depending on the system)

Display of distance data

Acoustic and visual signal
Display with integrated piezo speaker. Distance displayed in 1-cm intervals by 4-colour LED. The closer you get to an object, the faster the beep from the loudspeaker.

Acoustic signal
Loudspeaker (plug-in version for cigarette lighter socket or permanently installed in the cockpit or rear). Acoustic signal with changing pitch and intervals. The closer you get to an object, the faster the beeps.

Fastening of the sensors

Sub-mounted sensors
Easy-to-fit sensors for flexible installation. The rugged housing can easily be fitted beneath the rear bumper or other body parts. Ideal for larger vehicles, such as trucks, buses or agricultural machinery.
Dimensions (W x H x D): 70 x 40 x 25 mm

Built-in sensors
Perfect finish: the sensors are integrated in the rear bumper! They are pushed into the drilled holes where they fit tightly. Barely visible. Ideal for buses and larger vehicles with metal bumpers.

Dimensions: Ø 18 – 24 mm; depth 18 – 25 mm

Mounting profiles
Quick and easy installation: the sensors are factory-fitted on two mounting profiles. The profiles can be fastened to the bumper or, optionally, to the twin rear doors (van).
Dimensions of one profile (L x W):
547 mm x 56 mm

Totally accurate at the ramp

Parking aids for trucks, buses, agricultural machinery

Trucks up to 7.5 t are mainly used for local distribution of goods. The stress of constant manœuvring in narrow courtyards leaves its mark not only on the driver's nerves. To protect your fleet and save on repair costs you should make a timely investment in a WAECO MagicWatch parking aid.

For all larger vehicles we recommend using the MagicWatch MW 650 or MWE 650 model. MagicWatch MW 650 comes with sub-mounted sensors for quick and easy installation to the underside of the rear bumper. MagicWatch MWE 650 has built-in sensors to be integrated into the rear bumper for an aesthetically perfect result.

The parking aids are automatically activated as soon as you change into reverse. When you approach the next obstacle you receive an acoustic and visual warning.

A convenient extra: the digital distance indicator (4-colour-LED) shows the distance in a range between 30 and 250 cm down to the last centimetre. That means when you are approaching a loading ramp, you can keep the very distance that's ideal for lowering the tail lift. Which makes for quicker and easier loading – and time is money, after all.

MagicWatch MW 650 and MWE 650: safe manœuvring for trucks, buses and agricultural machinery

› Extra-large range up to three metres
› Acoustic and visual warning function
› Digital Signal Memory (DSM)
› Splash-proof components
› Extendable sensor cables up to 10 metres
› System self-diagnosis
› Specially designed for metal bumpers (MWE 650)

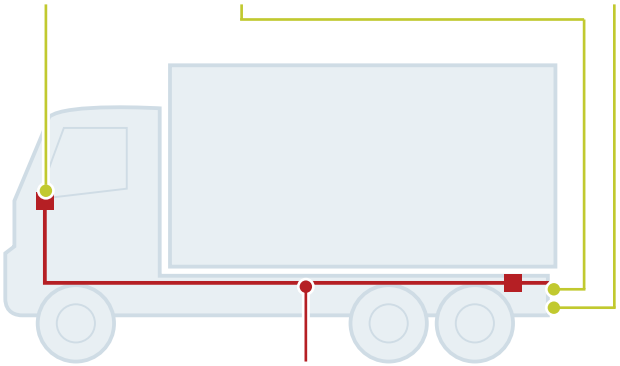
Contents, specifications and availability are subject to change serving the technical improvement.

Ideal for light trucks up to 7.5 t

The display unit is firmly installed in the truck cabin

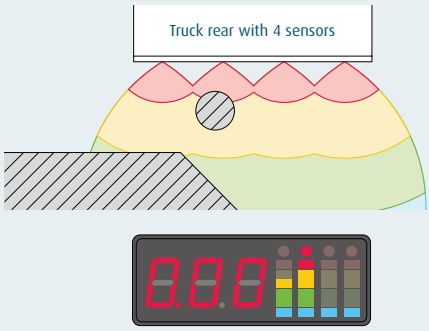
MWE 650
Easy installation with four sensors integrated in the rear bumper

MW 650
Easy installation with four sensors mounted to underside of the rear bumper



Hard-wired signal transmission from the base unit to the receiver

Visual warning function on the MW 650 and MWE 650



Left: digital display shows distance at centimetre accuracy

Right: 4-colour LED displays distance for each sensor

A single glance is enough to know which of the four sensors is closest to an obstacle.

WAECO MagicWatch MW 650

3.07

Rear parking aid for trucks, DSM, 4 sub-mounted sensors

Features & functions

- Distance measurement with 4 ultrasonic sensors
- Activation of the system via reverse gear
- Free voltage supply from 10 volts to 32 volts
- System self-diagnosis with error indication
- Acoustic and visual warning function with 4-colour LED
- DSM (Digital Signal Memory)
- Distance to the obstacle indicated by LEDs in 1 cm intervals
- Position of the obstacle indicated on the display
- Range: approx. 30 cm to 250 cm
- Flexible installation with sub-mounted sensors

Test mark	E-approved to automotive directive

Scope of delivery: 4 ultrasonic sensors (2.5 m cable), 1 splash-proof control unit, 1 visual / acoustic display unit with 15 m supply cable, fixing materials, installation and operating instructions

Product	Ref. No.
MagicWatch MW 650	MW-650-4DSM

E 13

For 12 and 24 volts

Designed for larger vehicles

Easy fitting with sub-mounted sensors

Splash-proof control unit

Installation time: approx. 2 to 3 hours

WAECO MagicWatch MWE 650

3.07

Rear parking aid for trucks, DSM, 4 built-in sensors

Features & functions

- Distance measurement with 4 ultrasonic sensors
- Activation of the system via reverse gear
- Free voltage supply from 10 volts to 32 volts
- System self-diagnosis with error indication
- Acoustic and visual warning function with 4-colour LED
- DSM (Digital Signal Memory)
- Distance to the obstacle indicated by LEDs in 1 cm intervals
- Position of the obstacle indicated on the display
- Range: approx. 30 cm to 250 cm
- Perfect finish with built-in sensors
- Specially designed for metal bumpers

Test mark	E-approved to automotive directive

Scope of delivery: 4 ultrasonic sensors (2.5 m cable), 1 splash-proof control unit, 1 visual / acoustic display unit with 15 m supply cable, fixing materials, installation and operating instructions

Product	Ref. No.
MagicWatch MWE 650	MWE-650-4DSM

E 13

For 12 and 24 volts

Designed for larger vehicles

Perfect finish with built-in sensors

Splash-proof control unit

Installation time: approx. 3 to 4 hours

Parking aids: smart, reliable, easy to fit 12 / 24 volts

Built to fit

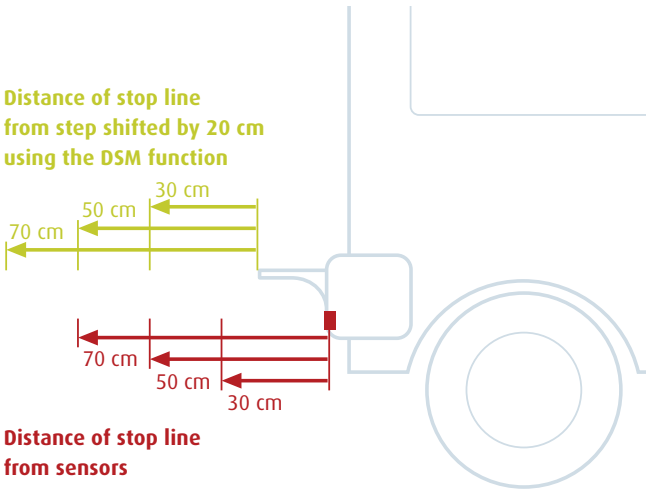
Parking aids for every (mounting) situation

Manœuvring a van is often difficult just because obstacles of medium height are barely visible or cannot be seen by the driver at all. It doesn't take much to get a bad dent. No need to suffer that kind of stress: your MagicWatch parking aid warns you when you are getting too close to an obstacle while reversing.

With **MagicWatch MWE900 and MWE910** WAECO offers two highly reliable systems that have proven their worth for use in vans. They come with **ultra-small sensors (only 18 mm in diameter)** and a comprehensive range of fitting accessories for **hassle-free installation even in difficult or confined spaces**. The variable stop line (see diagram on the right) is yet another bonus that sets these MagicWatch models apart from other parking aid systems.

Variable stop line

The parking aid sensors are located at the rear bumper, but there's a tow-bar or step protruding beyond the bumper. No problem, MagicWatch will take account of such "extras". Simply shift back the stop line (by up to 40 cm) and use your parking aid as you normally would.


Distance of stop line from step shifted by 20 cm using the DSM function
30 cm
50 cm
70 cm
70 cm
50 cm
30 cm
Distance of stop line from sensors

Contents, specifications and availability are subject to change serving the technical improvement.

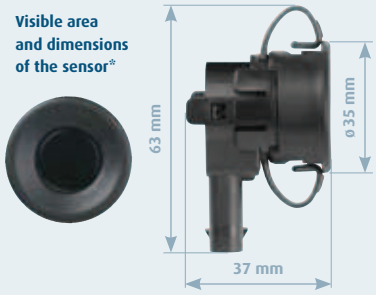
For perfectionists
Parking aids with the smallest sensors available

Seeing is believing, although it's not all that easy ... The sensors of the MagicWatch MWE 900 and MWE 910 parking aids are only 18 mm in diameter and feature a mere 18 mm installation depth. A genuine record in the market, as competitors' sensors are far larger and therefore less elegant than WAECO products. The sensors are painted in the vehicle colour and then integrated into the rear bumper (MWE 900) or into the front and rear (MWE 910). Whichever model you opt for, you are bound to get a perfect installation result in terms of technology and appearance.

WAECO sensors: **small and unobtrusive**

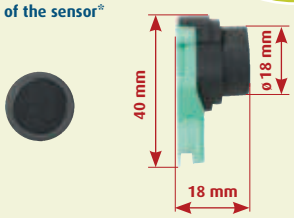
Competitor

Visible area and dimensions of the sensor*



WAECO

Visible area and dimensions of the sensor*

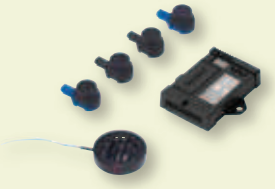


* Scaled-down view, 50% of the original size

WAECO MagicWatch MWE 900

3.07

Rear parking aid with 4 built-in sensors



Test result: good

Features & functions

- Latest-generation sensors
- Suitable for difficult installation situations
- Distance measurement with 4 ultrasonic sensors
- Activation of the system via reverse gear
- System self-diagnosis with error indication
- Acoustic warning function
- Range: 30 cm to 180 cm
- Option to shift the stop line
- For all vehicles with 12 volts to 30 volts power supply
- Very compact sensors (Ø18 mm x 18 mm),
- Sensors can be spray-painted
- PPS Parameter Programming System (to set system parameters such as sensitivity, visual rejection of mounted parts, etc.)

Test mark e-approved to automotive directive

Scope of delivery: 4 ultrasonic sensors, 1 control unit, 1 membrane speaker, cardboard painting aid, comprehensive fixing materials, installation and operating instructions

Product	Ref. No.
MagicWatch MWE 900	MWE-900-4PPS
Optional extras	
1.5 extension cable for sensors	2221500002
Distance indicator display (for 12 volts)	9101500002

e12

For 12 and 24 volts

High-performance, latest-generation sensors

Range: 30 cm to 180 cm

Parameter Programming System (PPS)

Certified to ISO 17386

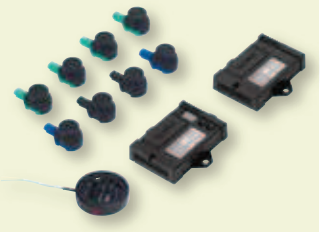
MagicWatch Accessory

MWE parking aids feature a digital colour display that shows the distance as a graphic and in digits. Ready for use in vehicles with 12-volt electrics.

WAECO MagicWatch MWE 910

3.07

Parking aid with 8 built-in sensors for front and rear



Features & functions

- Distance measurement with 8 ultrasonic sensors
- Activation of the rear system via reverse gear
- Activation of the front system with switched on ignition, deactivation via speed signal
- System self-diagnosis with error indication
- Acoustic warning function
- Range rear: 30 cm to 180 cm
- Range front: 25 cm to 95 cm
- Stop line can be shifted for front and rear
- For all vehicles with 12 volts to 30 volts power supply
- Very compact sensors (Ø18 mm x 18 mm),
- Sensors can be spray-painted
- PPS Parameter Programming System (to set system parameters such as sensitivity, visual rejection of mounted parts, etc.)

Test mark e-approved to automotive directive

Scope of delivery: 8 ultrasonic sensors (4 rear, 4 front sensors), 2 control units, 1 membrane speaker, comprehensive fixing materials, installation and operating instructions, cardboard painting aid

Product	Ref. No.
MagicWatch MWE 910	MWE-910-8PPS
Optional extra	
1.5 extension cable for sensor	2221500002

e12

For 12 and 24 volts

Range rear: 30 cm to 180 cm Range front: 25 cm to 95 cm

High-end system

Parameter Programming System (PPS)

Certified to ISO 17386

One for all:
Plug-in system for flexible use

Our tip for fleet operators: if you have trailers used with alternating towing vehicles, the radio-based parking aid MagicWatch MWE 2000 can give you many benefits. Based on wireless signal transmission, it saves you the bother of having to lay cables from the rear of the trailer to the cockpit. The compact loudspeaker will easily move from one vehicle to another. It simply plugs into the cigarette lighter and is instantly ready to receive signals.

Boundless freedom and ease

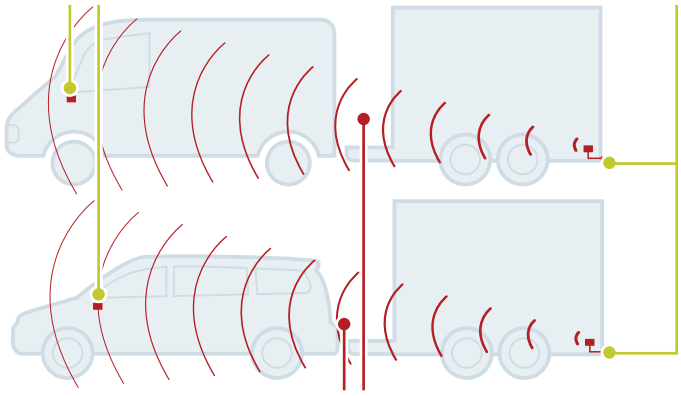
MWE 2000 – wireless parking aid for trailers

Plug-in version for alternating towing vehicles 12 / 24 volts

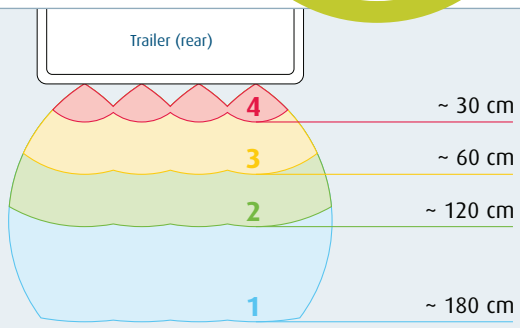
Ideal for trailers towed by changing vehicles

The loudspeaker of MagicWatch MWE 2000 simply plugs into the cigarette lighter socket, regardless of which towing vehicle you are going to use.

Easy installation of the four sensors in the trailer's rear bumper



Wireless signal transmission from the base unit to the receiver



Hearing in the front what's going on behind

The parking aid's monitoring range splits up into four zones. The closer the vehicle gets to an obstacle the faster the beep from the loudspeaker. As you enter zone 4, the parking aid emits a continuous tone – the signal for you to stop. At this point the distance to the obstacle would normally be 30 cm. MWE 2000 gives you the option to shift the stop line to account for mounted parts on the back of the vehicle.

WAECO MagicWatch MWE 2000 — 3.07

Rear parking aid with wireless transmission, plug-in version for flexible use, 4 built-in sensors

Features & functions

- Distance measurement with 4 ultrasonic sensors
- Acoustic display with changing pitch and intervals
- Activation of the system via reverse gear
- Voltage supply: 12 volts and 24 volts
- System self-diagnosis with error indication
- Radio link between the control unit and receiver
- Radio frequency: 433 MHz
- Range: approx. 30 cm to 180 cm
- Option to shift the stop line
- Built-in sensors, just 18 mm in diameter, for a perfect finish

Test mark	E-approved to automotive directive

Scope of delivery: 4 ultrasonic sensors, 1 control unit, receiver with loudspeaker, fixing materials, installation and operating instructions

Product	Ref. No.
MagicWatch MWE 2000	MWE-2000-4FM

E 24

For 12 and 24 volts

Loudspeaker plugs into the cigarette lighter socket

Wireless, radio-based operation

Installation time: approx. 2 to 3 hours

Contents, specifications and availability are subject to change serving the technical improvement.

Wireless **radio-based** operation

Well thought-out from front to rear

The wireless parking aid MagicWatch MW 2500 was designed for hassle-free reversing. Installation, too, is simplicity itself.

In the rear: super-compact sensors, integrated in easy-to-fit mounting profiles which can also be attached to the twin rear doors of a van.

In the front: an adhesive acoustic display unit that is simply fixed where you want it and firmly wired with 12 volts DC.

Ease of use guaranteed: No need to lay cables across the length of the vehicle!

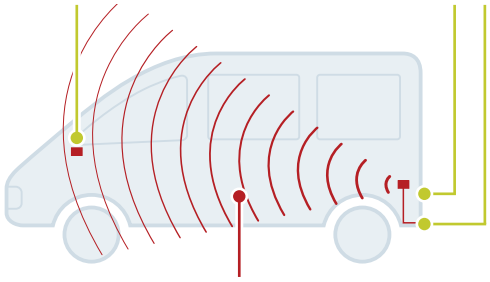
Quick and easy to install

MW 2500 – wireless parking aid with mounting profiles

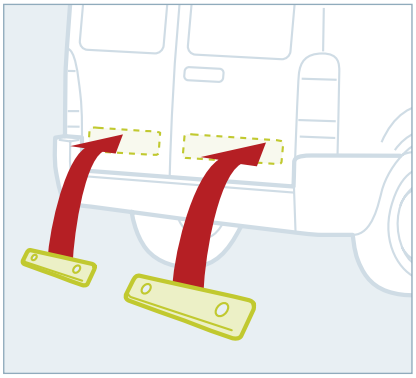
Ideal for vans and light trucks

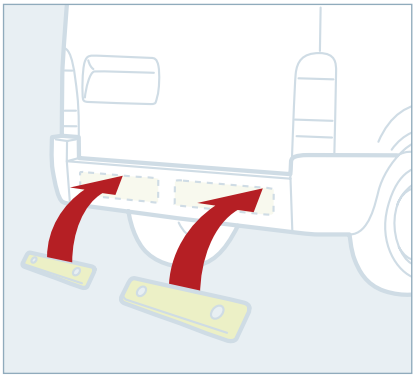
The receiver is firmly installed in the vehicle's cockpit.

Easy installation of the two mounting profiles on the rear bumper or on the rear door(s)



Wireless signal transmission from the base unit to the receiver





Steps in the bumper? No hurdle for MagicWatch MW 2500! Its mounting profiles, incorporating the sensors, can just as well be attached to the rear doors.

WAECO MagicWatch MW 2500 — 3.07

Rear parking aid with wireless transmission, with 4 sensors integrated in two mounting profiles, for light trucks

Features & functions

- Distance measurement with 4 ultrasonic sensors
- Acoustic display with changing pitch and intervals
- Activation of the system via reverse gear
- Voltage supply: 12 volts and 24 volts
- System self-diagnosis with error indication
- Radio range: up to 20 m, depending on installation
- Radio frequency: 433.92 MHz
- Range: approx. 30 cm to 180 cm
- Option to shift the stop line
- Especially suitable for vans, light trucks and motorhomes
- Sensors integrated in two mounting profiles for easy installation
- Compact control unit (60 x 40 mm), concealed mounting
- Operating temperature: –25°C to +70°C

Test mark	E-approved to automotive directive
Dimensions (L x W) of one mounting profile	547 x 56 mm

Scope of delivery: 4 ultrasonic sensors, 1 control unit, receiver with loudspeaker, 2 mounting profiles, fixing materials, installation and operating instructions

Product	Ref. No.
MagicWatch MW 2500	MW-2500-4FM

E 24

For 12 and 24 volts

Quick and easy to install with mounting profiles

Wireless, radio-based operation

Installation time: approx. 2 hours

WAECO MagicSpeed CBI

The digital-analogue translator

For running analogue retrofit products in CAN bus vehicles

You want to retrofit an analogue accessory, but your vehicle has a digital CAN bus system? Go ahead, it's no problem at all with the CAN bus interface from WAECO! The module ensures a smooth data flow between the analogue and digital technologies.

More and more vehicles are equipped with the CAN bus technology. This also means that all of their comfort functions are controlled by digital signals from the CAN bus system. The problem is many retrofit products require analogue signals. This is easily solved by fitting the WAECO CAN bus interface. The module "translates" the digital CAN bus signals into analogue impulses and transmits them to the retrofitted accessory.

The CAN bus interface is suitable for use with **many WAECO comfort and safety accessories** (see the picture series on the top right-hand page). **It can also be used for similar products of other makes**, as most of them will require an analogue speed or rev signal.

The WAECO interface also paves the way for built-in navigations systems.

The WAECO CAN bus interface also makes vans fit for analogue aftermarket products. It is compatible with most commonly used models built by Citroën, Fiat, Ford, Iveco, Mercedes-Benz, Nissan, Peugeot, Renault and Volkswagen.

A complete list of vehicle models is available at **www.waeco.com/en/cbi100**

Contents, specifications and availability are subject to change serving the technical improvement.

The perfect “translator” for e. g.:

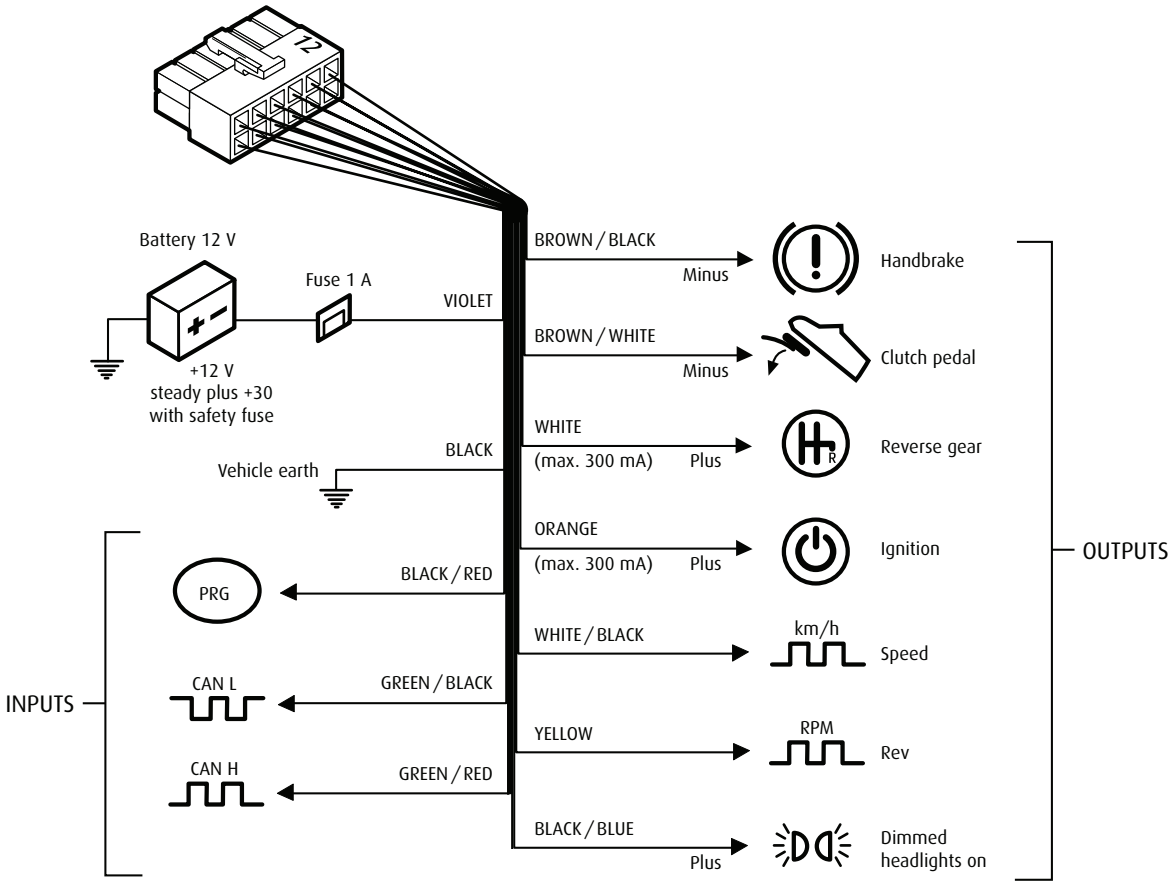
WAECO MagicSpeed MS 880
cruise control
Pages 134 / 135

WAECO MagicSpeed HUD
head-up display
Pages 136 / 137

all WAECO MagicWatch
parking aids
Pages 124 – 129

all WAECO PerfectView
reversing video systems
Pages 86 – 109

Circuit diagram for MagicSpeed CBI 100



WAECO MagicSpeed CBI 100

3.06

Interface for converting digital CAN bus signals into analogue signals

Features & functions

› 7 analogue output signals
› Automatically identifies the type of vehicle
› Universal product for all commonly used types of vehicles

Test mark	e-approved to automotive directive

Scope of delivery: control unit, set of cables, fuse and installation fittings

Product	Ref. No.
MagicSpeed CBI 100	9101400020

NEW

e1

WAECO MagicSpeed MS

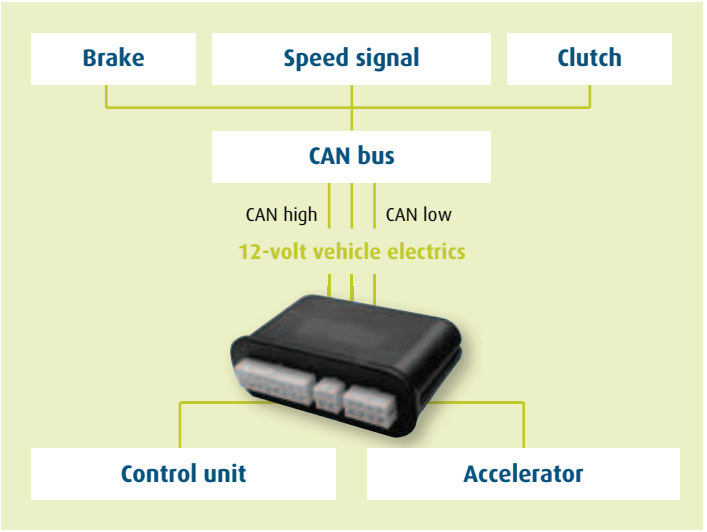
Easy to fit
1 h max.

Choose your own speed!

Cruise control for vans with CAN bus and electronic accelerator

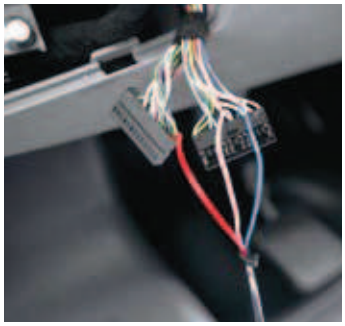
It makes absolute sense to use a cruise control in a delivery van. Even more so when it is so quick and easy to install as the MagicSpeed MS 900. Just under an hour is sufficient, there is hardly any standstill time for the vehicle.

The MS 900 owes this major installation advantage to its CAN bus compatibility, which ensures smooth operation within the vehicle's electronic system. MagicSpeed MS 900 works with a control unit that is directly linked to the electronic accelerator control by means of a vehicle-specific adapter cable. No soldering, no crimping, just plug and play!



Ease of installation shown on the example of Fiat Ducato

The interface where the MS 900 taps the signal is the on-board computer



Signal tapped with just three vehicle-specific plug-in connectors

Connection to the accelerator via T-plug

Connection of the control element to the dashboard or steering column

Contents, specifications and availability are subject to change serving the technical improvement.

WAECO MagicSpeed MS 900

3.06

Cruise control for vehicles with comfort CAN bus and electronic accelerator

Features & functions

- Set speed and reset previous speed
- Fine speed adjustment (tap up, tap down)
- After code entry system adjusts itself automatically to the vehicle parameters (speed signal and sensitivity)
- ON / OFF
- All signals required are controlled via CAN bus system
- Easy to fit with cable sets for specific vehicles, no soldering or crimping – just plug and play
- Choice of two control elements
- **Preconditions for installation: 12 V vehicle electrics, electronic accelerator, comfort CAN bus**

Test mark	e-approved to automotive directive, German and European operating permit

Scope of delivery: electronic module, set of cables, fixing materials, installation and operating instructions

Product	Ref. No.
MagicSpeed MS 900 **for Fiat Ducato, Peugeot Boxer and Citroën Jumper** from 2006	MS-901
MagicSpeed MS 900 **for Opel Movano / Vivaro, Renault Master / Trafic and Nissan Interstar / Primastar** from 2006	MS-902

e11

For vehicles with electronic accelerator and CAN bus

Designed for specific vehicles

Extremely fast installation (0.5 – 1 hour)

Control elements for MagicSpeed MS 900

WAECO MagicSpeed Accessories

3.06

Control lever to be fitted on the steering column

Features & functions

- Easy installation on the steering column (left), inclination variable with angle disks
- ON / OFF switch with status indication fitted on the steering lever
- Fine speed adjustment (tap up, tap down)

Test mark	e-approved to automotive directive

Scope of delivery: control lever, plug housing, fixing materials, installation instructions

Product	Ref. No.
Control lever	MS-BE6

e13

Attractive design in original equipment quality

Control element to be fitted on the dashboard

Features & functions

- Easy installation on the dashboard
- ON / OFF switch
- Fine speed adjustment (tap up, tap down)

Test mark	e-approved to automotive directive

Scope of delivery: control element, plug housing, fixing materials, installation instructions

Product	Ref. No.
Control element	MS-BE5

e13

Easy installation on the dashboard

Automatic cruise control and speed limiter

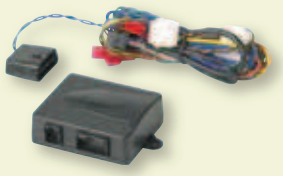
For vehicles with electronic accelerator

The MagicSpeed cruise control relieves the driver on long journeys by **automatically keeping a set speed** – a comfortable and safe way to avoid exceeding speed limits. It is still possible to accelerate the vehicle for overtaking. Alternatively, you can change to the **speed limiter** function. In this mode **a set speed limit will not be exceeded**, even at full throttle. MagicSpeed MS 880 is suitable for all vehicles with electronic accelerator, for analogue as well as for CAN bus systems. Three control elements are available to suit different vehicle models.

Please note that the vehicle-specific cable set for installation of the MS 880 is an optional extra, so it has to be ordered separately.

WAECO MagicSpeed MS 880 — 3.06

Comfort cruise control with speed limiter function



Features & functions

- Set speed set and reset previous speed
- Fine speed adjustment (tap up, tap down)
- Adjusts itself automatically to the vehicle parameters (speed signal and sensitivity)
- Acoustic and visual self diagnosis
- ON / OFF
- Speed limiter function
- Easy to fit with cable sets for specific vehicles
- Choice of three control elements
- **Preconditions for installation: 12 V vehicle electrics, electronic accelerator or CAN bus system, vehicle-specific cable set required**

Test mark	e-approved to automotive directive

Scope of delivery: interface unit, electronic module, clutch switch, set of cables, fixing materials, installation and operating instructions

Product	Ref. No.
MagicSpeed MS 880	9101400024
Optional extra	
Signal amplifier MS-SV	MS-SV

NEW

e1

For vans with electronic accelerator

Designed to suit specific vehicles

Easy to fit

Can also be used as speed limiter

Contents, specifications and availability are subject to change serving the technical improvement.

Control elements and accessories for MagicSpeed MS 880

WAECO MagicSpeed Accessories

3.06

Control lever to be fitted on the steering column

Features & functions

› Easy installation on the steering column (left), inclination variable with angle disks
› ON / OFF switch with status indication fitted on the steering lever
› Fine speed adjustment (tap up, tap down)

Test mark e-approved to automotive directive

Scope of delivery: control lever, plug housing, fixing materials, installation instructions

Product	Ref. No.
Control lever	MS-BE4

e13

Attractive design in original equipment quality

Infra-red remote control to be fitted on the steering wheel

Features & functions

› Easy installation on the steering wheel with a belt band
› Remote control powered by a battery (CR2032 button cell)
› Remote control unit with low-battery LED
› ON / OFF switch (with status indication) to be fitted on the dashboard

Test mark e-approved to automotive directive

Scope of delivery: control element, control electronics, IR receiver, ON / OFF switch, power kit, fixing materials, installation instructions

Product	Ref. No.
IR remote control	MS-IR2

e13

Safe and secure: operation from the steering wheel

Control element to be fitted on the dashboard

Features & functions

› Easy installation on the dashboard
› ON / OFF switch
› Fine speed adjustment (tap up, tap down)

Test mark e-approved to automotive directive

Scope of delivery: control element, plug housing, fixing materials, installation instructions

Product	Ref. No.
Control element	MS-BE3

e13

Easy installation on the dashboard

WAECO MagicSpeed CBI 100

3.06

Interface for converting digital CAN bus signals into analogue signals

Features & functions

› 7 analogue output signals
› Automatically identifies the type of vehicle
› Universal product for all commonly used types of vehicles

Test mark e-approved to automotive directive

Scope of delivery: control unit, set of cables, fuse and installation fittings

Product	Ref. No.
MagicSpeed CBI 100	9101400020

NEW

e1

Vehicle-specific cable sets for MS 880 (selection from the complete range)

3.06

Make	Model / year (notes)	Ref. No.
Citroën	Berlingo/2006/07 (5-pole plug only); Berlingo/from 2008	9101400040
	Jumper/from 2006 (please order MS-SV signal amplifier)	9101400029
Fiat	Doblò; Ducato 250/from 2006 (please order MS-SV signal amplifier)	9101400029
	Ducato 244/up to mid 2006	9101400030
Ford	Transit/from 2006; Transit Connect/from 2007; Tourneo Connect/from 2007	9101400048
Nissan	Kubistar; Kubistar 1.5 CDI; Interstar	9101400034
Opel	Vivaro, Movano	9101400034
	Combo/from 2006 (only for engine codes starting with Z and ending with X)	9101400032
Peugeot	Partner/up to 2008 (4-pole plug only)	9101400031
	Partner/from 2008	9101400040
	Boxer/up to 2006	9101400030
	Boxer/from 2006 (please order MS-SV signal amplifier)	9101400029
Renault	Kangoo/up to 2008; Kangoo 1.5 CDI/up to 2008; Trafic; Master	9101400034
	Kangoo/from 2008; Kangoo 1.5 CDI/from 2008	9101400043
Volkswagen	Caravelle/from 1999 (2.5 – 5 cylinder engine); T5 (petrol engine)	9101400030
	T5 1.9 TDI; T5 2.5 TDI	9101400047

NEW

More vehicle-specific cable sets at www.dometic-waeco.com

WAECO MagicSpeed HUD

Keep an eye on your speed

Drive safely and with full concentration thanks to WAECO MagicSpeed HUD

Keeping an eye on the speedometer and the road at the same time: it's possible with the WAECO head-up display. MagicSpeed HUD displays the current speed on a projection film attached to the windscreen at the driver's eye level. The system comes with an acoustic alarm function that can be activated to warn you when preset speed limits are exceeded. No need to check the speedometer all the time, no panic braking at the mere sight of a speed camera! MagicSpeed HUD helps you drive safely and with full concentration.

A convenience and safety feature that used to be reserved to the luxury class. Now available for retro-fitting in WAECO quality!

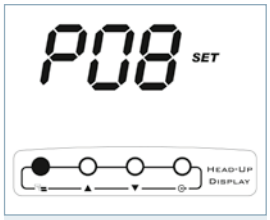
- **Universal use** – for all vehicles with 12-volt electrics and speed signal
- **Easily readable**, even when it's sunny or dark
- **Acoustic warning function** (can be switched off)
- **Ease of use** with four programming buttons
- **Fast installation** (about 0.5 to 1 hour)

MagicSpeed HUD is connected to ignition, earth and speedometer signal. If you are not sure where to find the speedometer signal cable in your vehicle, contact the Dometic WAECO representation in your country.

Contents, specifications and availability are subject to change serving the technical improvement.

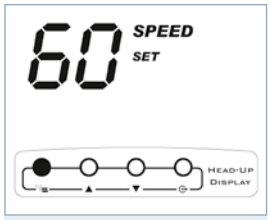
Luxury-class comfort at the touch of a button – programmed in 5 steps

Stand-by mode
The display is ready for service as soon as you turn on the ignition. All indicator lamps flash for about two seconds.



Coarse adjustment
Adjust the speed readout of the display to that of the speedometer.
To be done in four steps (10, 20, 40, 80 km/h).

Fine adjustment
Adjust the speed readout of the display to exactly that of the speedometer.
To be done in a range from 50 to 250 km/h.



Set warning speed
Set at what speed limit the display is to emit an audible warning signal (eight stages, from 30 to 130 km/h).

Warning tone
Naturally, you can also disable the warning function.

WAECO MagicSpeed HUD

3.06

Head-up display with speed warning function

Features & functions

- Displays current speed on the windscreen
- Speed warning function (e.g. at 30, 50, 70 or 100 km/h)
- Ease of use with 4 programming buttons
- Non-reflecting, single-coated projection film
- Light sensor automatically adjusts LED illumination (dims in the dark)
- Speaker on top of the housing (warning function can be disabled)
- 12-volt supply via ignition plus
- 3-pole connection cable (ignition, earth, speed signal)

Test mark	E-approved to automotive directive

Scope of delivery: display, 3-pole connection cable, projection film, installation fittings, installation and operating instructions

Product	Ref. No.
MagicSpeed HUD	MHUD-100
Optional extras	
Signal amplifier	MS-SV
CAN bus interface (p. 130)	9101400020
Spare part	
Projection film	MHUD-100PF

E9

Safe and convenient: keep the speed and the road in view

With speed warning function

Light sensor automatically adjusts LED illumination

Daytime running lights improve safety

MagicTouch – the automatic daytime light control

Driving with lights on at daytime is mandatory in many European countries and considered a matter of course in the interest of traffic safety. For trucks, buses and other utility vehicles without factory-fitted daytime running lights (DRL), Dometic WAECO offers the MagicTouch daytime light control for retrofitting.

When you start the ignition **MagicTouch TFL 100** automatically activates the complete vehicle lighting (dipped headlights, parking lights, sidelights, number plate lights). Only during the actual engine start the daytime light is shortly switched off. There is no need to operate the original light switch, but its function is completely is retained. When the light is switched on manually, the daytime light control is deactivated.

Extra convenience is provided by the **coming home function**: when the ignition has been turned off, the dipped headlights stay on for a selectable period (0 to 120 sec.)

Is driving with DRL safer? Obviously!

Large vehicles in bright daylight – how can they be overlooked? They obviously can. Studies have revealed that, even on a clear day, vehicles driving with dimmed headlights on during daylight hours are perceived faster than unlighted vehicles, and the risk of being overlooked is lower. Our example illustrates the effect under "normal" daylight conditions.

Contents, specifications and availability are subject to change serving the technical improvement.

More and more drivers switch their lights on

The mandatory use of daytime running lights throughout Europe would avoid many accidents, as a study of the ACE (Auto Club Europe) shows backed by alarming figures. Even so, driving with lights on during daylight hours has not yet become common practice in all European countries, but is expressly recommended in some countries. Every driver is free to switch the dipped headlights on during daylight hours to protect themselves and other road users. The ideal way is to use an automatic light control system.

Daylight running light regulations in Europe

Country	Where?	When?
Bosnia-Herzegovina	in and out of town	year round
Bulgaria	in and out of town	01/11 – 31/03
Croatia	in and out of town	October – March
Czech Republic	in and out of town	year round
Denmark	in and out of town	year round
Estonia	in and out of town	year round
Finland	in and out of town	year round
France	– strongly recommended –	–
Germany	– strongly recommended –	–
Hungary	out of town	year round
Iceland	in and out of town	year round
Italy	out of town	year round
Latvia	in and out of town	year round

Country	Where?	When?
Lithuania	in and out of town	year round
Macedonia	in and out of town	year round
Montenegro	in and out of town	year round
Norway	in and out of town	year round
Poland	in and out of town	year round
Portugal	on certain routes	year round
Romania	out of town	year round
Russia	out of town	year round
Slovakia	out of town	year round
Slovenia	in and out of town	year round
Sweden	in and out of town	year round
Switzerland	– strongly recommended –	–

WAECO MagicTouch TFL 100

3.05

Daytime light control with coming home function

Features & functions

- Automatically activates the dimmed headlights when the ignition has been turned on
- Simultaneously activates the complete vehicle lighting (dipped headlights, parking lights, sidelights, number plate lights)
- No need to operate the light switch
- With coming home function: dipped headlights stay on (for 0 to 120 seconds, as set beforehand)
- Universal unit for all utility vehicles
- Conforms with ECE R48 regulation
- Daytime light control is switched off when the light switch is operated manually and during engine start
- Simple installation, easy-to-follow mounting instructions
- Voltage supply: 12 volts DC

Test mark e-approved to automotive directive

Scope of delivery: control unit, set of cables, installation and operating instructions

Product	Ref. No.
MagicTouch TFL 100	2221300001

e11

Automatic light activation – including during daylight hours

Can be deactivated manually

Coming home function up to 120 seconds

Simple installation

Beware of burglars – protect yourself from gas attacks

MagicSafe gas detector – for your safety's sake

Robberies involving knock-out gas are dramatically on the increase. The anonymousness of remote parking areas is welcomed by a growing number of unscrupulous burglars, who use narcotic gas to put their victims into a deep sleep to gain easy access to their cash, credit cards, ID-cards, laptops and mobiles. Don't just trust your own senses when you're having that hard-earned sleep. After all, you don't want to wake up to a disaster. Be on the safe side – with the **MagicSafe MSG 150 gas detector**.

The gas detector recognises all common narcotic gases based on ether, chloroform, butane, ethane, or trichloroethane. It triggers the alarm as soon as it detects any hazardous substances in the ambient air. The noise of its integrated buzzer just can't be ignored. A red LED lights up for extra warning. Once it has been activated, the gas detector starts its self-testing mode and automatically adjusts itself to the ambient air. Any system malfunctions are immediately indicated. Moreover, you can check the sensor function manually whenever you want by pressing the test button. The test button can also be used to silence the alarm.

By the way: If you have fitted your vehicle with the MS 650 alarm system, the MagicSafe gas detector works as a complementary module, which means you can use the alarm system's remote control for the gas detector, too. Alternatively, the gas detector can be complemented with an external siren.

Contents, specifications and availability are subject to change serving the technical improvement.

WAECO MagicSafe MSG 150

Gas detector 12 and 24 volts

3.08

Features & functions

- Responds to all common narcotic gases
- Audible and visual alarm
- Integrated 10-A switching relay
- Adjusts automatically to the room atmosphere
- Temperature-independent gas sensor
- Automatic self test with visual error indication
- Manual function test
- Self-cleaning gas sensor
- Three usage options:
  – As stand-alone unit
  – In combination with WAECO MagicSafe MS 650 car alarms (12 V operation only)
  – In combination with the WAECO MS-620SI siren (12 V operation only)
- For 12 / 24-volt power supply

Current input	approx. 80 mA
Control output	1
Output switching current	10 A
Test marks	CE, e-approved to automotive directive

e13

For 12 and 24 volts

Detects all common narcotic gases

Alarm via car horn

Audible and visual alarm

External siren available as optional extra

Top offer! Safety you can afford!

Scope of delivery: MSG 150 gas detector, mounting plate, installation and operating instructions

Product	Ref. No.
MagicSafe MSG 150	MSG-150-N
Optional extra	
External siren (12 V)	MS-620SI

Easy connection to 12 or 24 volts: just plug into cigarette lighter socket, that's all.

Easy to fit with click-in fastener

Reliably detects all common knock-out gases

Dometic SAFE

A safe bet for storing your valuables

Dometic safes leave no point of attack for thieves and burglars. Laser-cut doors and two 18 mm steel pivots provide safe storage for your valuables while on the move. The ideal security concept for your vehicle – designed by a company that sets the quality benchmarks for hotel safe security worldwide.

Compact and sturdy: the key-locking **mechanical models Dometic SAFE 281C and 361C** provide many features for enhanced security.

- Mechanical locking system
- Laser-cut doors and frames
- Tight tolerances between door and frame
- Door locking with two 18 mm steel pivots
- Flexible installation: horizontally or vertically
- Available in two sizes:
  compact safe or laptop format

Extra security: the two **automatic models Dometic SAFE MD 281C and MD 361C** meet highest demands in terms of operating comfort and design.

- Automatic motor locking
- Electronic locking by code entry
  with 5-minute memory function
- Illuminated LED display
- Emergency access with masterkey
- Laser-cut doors and frames
- Tight tolerances between door and frame
- Door locking with two 18 mm steel pivots
- Flexible installation: horizontally or vertically
- Available in two sizes:
  compact safe or laptop format

Contents, specifications and availability are subject to change serving the technical improvement.

Dometic SAFE 281C / 361C

3.34

Safes with mechanical locking system
For secure storage of valuables in vehicles

SAFE 281C

SAFE 361C

Optional fixing kit

	281C	361C
Capacity	8.3 litres	24.5 litres
Net weight	6.5 kg	12.7 kg
Dimensions [W x H x D]	280 x 165 x 235 mm	360 x 190 x 410 mm
Steel wall thickness	Door: 5.0 mm, cabinet: 1.5 mm	
Colour	Anthracite	
Quality features	Laser-cut door, very tight tolerances between door and cabinet, door locking with 2 steel pivots, robust inside hinges and locks without any plastic parts, vertical or horizontal installation	
Certification	CE	

Scope of delivery: safe, 2 keys, operating instructions

Product	Ref. No.
SAFE 281C	9106600001
SAFE 361C	9106600002
Optional extra	
Fixing kit	9106600005

Mechanical locking system

High-grade finish for maximum security

Easy key operation

Dometic SAFE 361C in laptop size

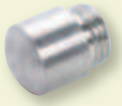
Dometic SAFE MD 281C / MD 361C

3.34

Safes with automatic locking system
For secure storage of valuables in vehicles

SAFE MD 281C

SAFE MD 361C



Optional aluminium door knob

Optional fixing kit

	MD 281C	MD 361C
Capacity	8.3 litres	24.5 litres
Net weight	6.5 kg	12.8 kg
Dimensions [W x H x D]	280 x 165 x 235 mm	360 x 190 x 410 mm
Steel wall thickness	Door: 5.0 mm, cabinet: 1.5 mm	
Colour	Anthracite	
Quality features	Automatic motor locking system [battery-powered], electronic locking with 4-digit code [changeable] and 5-minute memory function, battery-low indication, laser-cut door, very tight tolerances between door and cabinet, door locking with 2 steel pivots, vertical or horizontal installation	
Certification	CE	

Scope of delivery: safe, 2 emergency access keys, plastic door knob, 4 Duracell batteries, operating instructions

Product	Ref. No.
SAFE MD 281C	9106600003
SAFE MD 361C	9106600004
Optional extras	
Aluminium door knob	9106600006
Fixing kit	9106600005

Automatic locking system

Electronic locking by code entry with 5-minute memory function

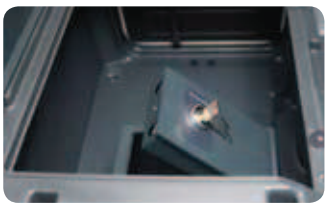
Attractive design with illuminated LED display

High-grade finish for maximum security

Dometic SAFE MD 361C in laptop size

15" laptop size

No point of attack for burglars: laser-cut doors and frames



Flexible installation: vertically or horizontally

Functional aesthetics: illuminated LED display on MD 281C and MD 361C safes

Practical laptop size: Safes 361C und MD 361C

Battery powered wet / dry vacuum cleaner

Lightweight, efficient, cordless

Forget about those flimsy toy cleaners, here's power for you: WAECO PowerVac – a blessing in your truck!
With its 90 watt / 400 mm water column performance, the battery powered vacuum cleaner copes with all the dirt you want to get rid of in your cabin or storage compartments. **Wet or dry – the PowerVac knows no difference.** Fitted with special attachments, it cleans the tiniest gaps and removes every spec of dust from the seat covers. Even the nastiest spills stand no chance of escaping its power. And all that without cables getting in your way. The PowerVac provides full manœuvrability even in small cabins. Your compact little helper requires very little space. You could even put it in one of the storage compartments – after all, they're clean now.

Contents, specifications and availability are subject to change serving the technical improvement.

WAECO PowerVac PV 100

3.31

Wet / dry vacuum cleaner with 12-volt rechargeable battery

Features & functions

- Handy, battery-powered vacuum cleaner for mobile use
- Maximum mobility with rechargeable 12-volt battery
- Can be recharged from 12 volts and 230 volts
- Easy-to-clean dust container and fabric filter
- Cleaning power: 400 mm water column

Motor	12 volts DC, 28,000 rpm
Battery	12 volts DC, 2.6 Ah
Operating time	approx. 18 min ±10%
Charging time	10 to 14 h (automatic cut-off)
Capacity	3.8 litres
Power consumption	approx. 90 watts
Cleaning power	approx. 400 mm water column (±10%)
Operating temperature	0°C to +40°C
Material	Handle: ABS Filter: polyester Dust container: PP
Dimensions (W x H x D)	270 x 320 x 198 mm
Weight	2150 g

Ideal for trucks

Universal cleaner for vehicle and home use

Full manœuvrability thanks to cordless operation

AUTO STRASSENVERKEHR TEST RESULT EXCELLENT

Scope of delivery: vacuum cleaner, hose, attachments for upholstery, rugs and narrow gaps, carrying strap, mains adapter, 12-volt charging cable, operating instructions

Product	Ref. No.
PowerVac PV 100	PV-100

Perfect cleaning performance

The WAECO PowerVac battery gives you up to 18 minutes of uninterrupted operation. Then it's time to connect it to the mains for recharging. Using the connection that is part of the set, recharging takes between 10 and 14 hours. The process is electronically controlled and completed to prevent overcharging. The vacuum cleaner comes with a 3.8 litre dust container and reusable fabric filter, both of which are simply taken off for emptying and cleaning.

Plenty of power

The wattage isn't everything, of course. The vacuum measured in "mm water column" is far more important for your cleaner's performance. You could say it is the "maximum torque" of a vacuum cleaner. And this is where your PowerVac excels: While high-tech vacuum cleaners require 1200 watts to obtain 1500 mm water column, the little, battery operated cleaner boasts an impressive 400 mm water column at only 90 watts!

Suitable for both wet and dry vacuum cleaning

Brush attachment for doormats, rugs and upholstery

Easy cleaning thanks to detachable dust container and fabric filter

Extendible crevice nozzle for narrow gaps